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## V.

**RECEIVING WATERS:**

The discharge is into an unnamed drainage ditch, thence into Autry Creek, thence into Bayou D'Arbonne in segment 080603 of the Ouachita River Basin. Subsegment 080603, Bayou D'Arbonne – From Lake Claiborne to Bayou D'Arbonne Lake, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 080603 was previously listed as impaired for enrichment/low DO, for which the below TMDL has been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL has been established for subsegment 080603:

**Tributaries to Bayou D'Arbonne Lake TMDL for Biochemical Oxygen-Demanding Substances**

Per the TMDL, the analysis indicated that Bayou D'Arbonne does not have a problem with over-enrichment due to nutrients. Therefore, TMDLs for nitrogen and phosphorus are not needed.

For Bayou D'Arbonne (subsegment 080603), the results of the projection modeling show that the existing DO standard of 5.0 mg/L can be maintained if man-made nonpoint sources are reduced by 95% in the summer and 85% in the winter. No reductions are needed for the point source loads. The only oxygen demanding point source discharge in the Bayou D'Arbonne subsegment (City of Dubach West Pond) is already discharging at advanced treatment levels and was shown to have little impact on DO in the main stem of Bayou D'Arbonne. Therefore, limitations will be permitted according to current state water quality policy.

The designated uses and degree of support for Segment 080603 of the Ouachita River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 080603	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not supporting	Full	Full	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 080603 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

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**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 080603 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish & Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible to for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

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**IX. PROPOSED PERMIT LIMITS:****Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>	11	10 mg/l	15 mg/l	Limits are set in accordance with Statewide Sanitary Effluent Limitations Policy (SSELP)
TSS	17	15 mg/l	23 mg/l	Limits are set in accordance with Statewide Sanitary Effluent Limitations Policy (SSELP)
Ammonia-Nitrogen	6	5 mg/l	10 mg/l	Limits are set in accordance with the previous LPDES permit for the facility

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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**X. PREVIOUS PERMITS:**
**LPDES Permit No. LA0063037:** Issued: May 6, 2003

Expires: May 31, 2008

**Final Effluent Limitations**
**Effluent Characteristics**
**Discharge Limitations**
**Daily Avg.**
**Daily Max.**
**Monitoring Requirements**
**Measurement Sample**
**Frequency**
**Type**

Flow

Report

Report

Continuous

Recorder

CBOD<sub>5</sub>

10 mg/l

15 mg/l

2/month

Grab

Total Suspended Solids

15 mg/l

23 mg/l

2/month

Grab

Ammonia-Nitrogen

5 mg/l

10 mg/l

2/month

Grab

Fecal Coliform Bacteria

200

400

2/month

Grab

The permit contains municipal water pollution prevention language.

The permit contains pretreatment language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**
**A) Inspections**

A review of the files indicates that the most recent inspection was performed on 4/28/06 in response to an incident report of 4/26/06 notifying the department of an unauthorized discharge at the facility. Immediate corrective action was taken to repair the levee of the oxidation pond causing the unauthorized discharge.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no recent enforcement actions have been administered against this facility.

**C) DMR Review**

A review of discharge monitoring reports for the period beginning October 1, 2005 through September 30, 2007 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS, Monthly Avg.	001	October 2005	15 mg/l	35.0 mg/l
TSS, Weekly Avg.	001	October 2005	23 mg/l	35.0 mg/l
Fecal Coliform, Monthly Avg.	001	October 2005	200 cfu/100 ml	248 cfu/100 ml
BOD <sub>5</sub> , Monthly Avg.	001	October 2005	10 mg/l	13.88 mg/l
TSS, Monthly Avg.	001	December 2005	15 mg/l	16.0 mg/l
BOD <sub>5</sub> , Monthly Avg.	001	January 2006	10 mg/l	15.2 mg/l
BOD <sub>5</sub> , Weekly Avg.	001	January 2006	15 mg/l	15.2 mg/l
TSS, Monthly Avg.	001	April 2006	15 mg/l	40.0 mg/l
TSS, Weekly Avg.	001	April 2006	23 mg/l	40.0 mg/l
BOD <sub>5</sub> , Monthly Avg.	001	April 2006	10 mg/l	14.40 mg/l
Fecal Coliform, Weekly Avg.	001	July 2006	400 cfu/100 ml	552 cfu/100 ml
CBOD, Monthly Avg.	001	September 2006	10 mg/l	10.2 mg/l
Fecal Coliform, Weekly Avg.	001	September 2006	400 cfu/100 ml	563 cfu/100 ml
CBOD, Monthly Avg.	001	October 2006	11 lbs/day	16.1 lbs/day
CBOD, Monthly Avg.	001	October 2006	10 mg/l	13.6 mg/l

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TSS, Monthly Avg.	001	October 2006	17 lbs/day	36.8 lbs/day
TSS, Monthly Avg.	001	October 2006	15 mg/l	31.0 mg/l
TSS, Weekly Avg.	001	October 2006	23 mg/l	34.0 mg/l
Fecal Coliform, Monthly Avg.	001	October 2006	200 cfu/100 ml	1710 cfu/100 ml
Fecal Coliform, Weekly Avg.	001	October 2006	400 cfu/100 ml	1975 cfu/100 ml
CBOD, Monthly Avg.	001	November 2006	11 lbs/day	18.1 lbs/day
TSS, Monthly Avg.	001	November 2006	17 lbs/day	53.2 lbs/day
TSS, Monthly Avg.	001	November 2006	15 mg/l	27.5 mg/l
TSS, Weekly Avg.	001	November 2006	23 mg/l	31.0 mg/l
Fecal Coliform, Monthly Avg.	001	November 2006	200 cfu/100 ml	598 cfu/100 ml
Fecal Coliform, Weekly Avg.	001	November 2006	400 cfu/100 ml	940 cfu/100 ml
TSS, Monthly Avg.	001	December 2006	17 lbs/day	50.0 lbs/day
TSS, Monthly Avg.	001	December 2006	15 mg/l	32.0 mg/l
TSS, Weekly Avg.	001	December 2006	23 mg/l	44.0 mg/l
CBOD, Monthly Avg.	001	January 2007	11 lbs/day	22.3 lbs/day
TSS, Monthly Avg.	001	January 2007	17 lbs/day	113.7 lbs/day
TSS, Monthly Avg.	001	January 2007	15 mg/l	30.0 mg/l
TSS, Weekly Avg.	001	January 2007	23 mg/l	36.0 mg/l
Ammonia-Nitrogen, Monthly Avg.	001	January 2007	6.0 lbs/day	17.6 lbs/day
CBOD, Monthly Avg.	001	February 2007	11 lbs/day	12.4 lbs/day
CBOD, Monthly Avg.	001	February 2007	10 mg/l	10.4 mg/l
Ammonia-Nitrogen, Monthly Avg.	001	February 2007	6.0 lbs/day	12.9 lbs/day
Ammonia-Nitrogen, Monthly Avg.	001	February 2007	5.0 mg/l	10.8 mg/l
Ammonia-Nitrogen, Weekly Avg.	001	February 2007	10.0 mg/l	12.0 mg/l
Ammonia-Nitrogen, Monthly Avg.	001	March 2007	6.0 lbs/day	8.8 lbs/day
Ammonia-Nitrogen, Monthly Avg.	001	March 2007	5.0 mg/l	10.4 mg/l
Ammonia-Nitrogen, Weekly Avg.	001	March 2007	10.0 mg/l	11.5 mg/l
TSS, Monthly Avg.	001	April 2007	17 lbs/day	22.5 lbs/day
TSS, Monthly Avg.	001	April 2007	15 mg/l	26.5 mg/l
TSS, Weekly Avg.	001	April 2007	23 mg/l	40.0 mg/l
CBOD, Monthly Avg.	001	May 2007	10 mg/l	10.2 mg/l
Fecal Coliform, Monthly Avg.	001	July 2007	200 cfu/100 ml	226 cfu/100 ml
Fecal Coliform, Weekly Avg.	001	July 2007	400 cfu/100 ml	824 cfu/100 ml
CBOD, Monthly Avg.	001	September 2007	11 lbs/day	15.5 lbs/day
CBOD, Monthly Avg.	001	September 2007	10 mg/l	19.2 mg/l
CBOD, Weekly Avg.	001	September 2007	15 mg/l	36.0 mg/l
TSS, Monthly Avg.	001	September 2007	15 mg/l	15.5 mg/l
TSS, Weekly Avg.	001	September 2007	23 mg/l	28.0 mg/l
Ammonia-Nitrogen, Monthly Avg.	001	September 2007	5.0 mg/l	<5.11 mg/l
Ammonia-Nitrogen, Weekly Avg.	001	September 2007	10.0 mg/l	10.2 mg/l
pH, minimum	001	September 2007	6.0 s.u.	5.4 s.u.

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**XII. ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.1375 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ gal/lb} \times 0.1375 \text{ MGD} \times 10 \text{ mg/l} = 11 \text{ lb/day}$$

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

**Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing the Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

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The audit evaluation period is as follows:

Audit period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII****TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV****REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Dubach, Municipal Wastewater Treatment Facility, January 2, 2008.